

# PROPOSAL EVALUATION

## ***Proposition 1E Integrated Regional Water Management (IRWM) Grant Program***

### ***Stormwater Flood Management Grant, Round 1, 2010-2011***

<b>Applicant</b>	American Rivers	<b>Amount Requested</b>	\$510,000
<b>Proposal Title</b>	Stormwater Source Control in the Consumes American Bear Yuba (CABY) Region	<b>Total Proposal Cost</b>	\$1,020,000

### **PROPOSAL SUMMARY**

This project will construct green infrastructure stormwater facilities to reduce sediment, pollutants, and erosive peak flows, while increasing groundwater infiltration and storage in the Yuba River watershed. It will also provide a highly exportable, innovative solution for controlling downstream flood risk. The project will be constructed at two public sites in the disadvantaged communities of Nevada City and Grass Valley—the Nevada County Rood Administrative Center (Rood Center) and the Yuba River Charter School (YRCS). The proposed approaches mimic nature's way of dealing with stormwater and provide not only economic, water quality and hydrology benefits, but also aesthetic and habitat values. In addition, the project has an innovative and robust monitoring component to quantitatively measure benefits, incorporates education and outreach activities for a range of audiences, and coordinates with other such efforts throughout the state to promote early learning and replication throughout the Cosumnes, American, Bear and Yuba (CABY) watersheds and the greater Sierra Nevada region.

### **PROPOSAL SCORE**

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	<b>9/15</b>	Economic Analysis – Flood Damage Reduction and Water Supply Benefits	<b>6/12</b>
Budget	<b>4/5</b>	Water Quality and Other Expected Benefits	<b>6/12</b>
Schedule	<b>5/5</b>	Program Preferences	<b>6/10</b>
Monitoring, Assessment, and Performance Measures	<b>4/5</b>	<b>Total Score (max. possible = 64)</b>	<b>40</b>

### **EVALUATION SUMMARY**

#### **Work Plan**

The Work Plan criterion is not fully addressed and is not supported by thorough documentation. It isn't clear in the application if each site is a separate Project or different phases of the same Project. Reviewers are concerned that the project has the potential to contaminate groundwater. Potential impacts to groundwater are not adequately identified and/or evaluated by the applicant in any feasibility or technical study. Task descriptions are of adequate detail and completeness so it is clear the project can be

implemented. Goals and objectives of the Project (page 2), in addition to comparing the Project to the goals and objectives of the IRWM Plan (page 7), are provided. Several maps of the Project location and site plans for both projects are included. The Proposed Projects are an extension of a previously completed project, so the applicant states that many of hurdles in completing this type of project are well understood, such as California Environmental Quality Act (CEQA) compliance and environmental permits.

## Budget

Tasks in the Proposal have detailed cost information, but not all costs are fully supported due to a lack of documentation of how costs were derived. Tasks in the Budget agree with the Tasks of the Work Plan. The Budget section provides a summary Budget chart, followed by a detailed Budget summary that includes number of hours, cost per hour, and job classification for each Task. For the construction component, the detailed Budget chart references chart 6a. The construction cost estimate total was \$395,000 but the summary Budget table has \$495,000. It is unclear why the two amounts are not consistent. Chart 6a includes estimates in relation to the construction activities such as "Excavation and earthwork, or Piping." These estimates are lump sums and include no documentation or explanation on how they were derived. The estimates don't include information such as cost per hour, number of hours, or job classification. Also, funding match for the Project is listed in lump sum without supporting information to substantiate how the costs were determined. Task 6 in the detailed Budget chart lists funding match as \$5,000, while in the "Sources of funding" Section, Task 6 funding match is listed as \$10,000. Task 9 funding match also does not match the detailed Budget chart and the "Sources of funding" Section.

## Schedule

The Schedule is organized by Tasks from the Work Plan. The time frame for the activities is reasonable. Construction administration runs the full length of the construction task; administration runs the full length of the Project; and CEQA is completed prior to construction. Also, the Project is scheduled to begin construction 5 months from the anticipated award date (October 1, 2011).

## Monitoring, Assessment, and Performance Measures

The criterion is fully addressed but is not supported by thorough documentation or sufficient rationale. The output and outcome indicators seem appropriate for the given Project Goals. The goals appear to be feasible within the life of the Proposal. Some of the goals are dependent on storm events; however, the proposal has mentioned that replication of a storm event is also possible to test the effectiveness of the project. Project Goal 2 states "Protect water quality through the capture and infiltration of 100 percent of runoff in approximately 90 percent of storm events" yet, the outcome indicator applies only to surface water and did not address groundwater quality.

## Economic Analysis – Flood Damage Reduction (FDR) and Water Supply Benefits

Average levels of FDR and water supply benefits can be realized through this proposal, however, supporting documentation is partially unsubstantiated. FDR benefits are described but not well quantified. FDR would presumably occur along the Yuba River, though location of the avoided damage is not specified. An estimate is provided of the reduction in stormwater leaving the treated sites annually, but the source of the estimate is unclear. It is unclear how such a small project would measurably affect storm flow and damage in the Yuba River. Water supply benefits are described in general terms as resulting from the capture and percolation of stormwater.

## **Economic Analysis – Water Quality and Other Expected Benefits**

Average levels of water quality and other benefits can be realized through this proposal; however, supporting documentation is partially unsubstantiated. Water quality and other benefits from green stormwater management are described in general terms. These include reduced sediment and surface pollutants being carried into streams, improved habitat and aesthetic value of stream flow, and possible reductions in downstream treatment costs. These benefits are described as limited in scale. Infiltration of storm water could redirect pollutants into the groundwater. Perhaps the project's most important benefit is as a demonstration - the project could generate local interest and knowledge in green stormwater management.

## **Program Preferences**

The Proposal includes projects that implement the following Program Preferences: Include Regional Projects and Programs; Practice Integrated Flood Management; and Expand Environmental Stewardship. However, the Proposal demonstrates a limited degree of certainty that the Program Preferences claimed can be achieved, and lacks thorough documentation for the breadth and magnitude of the Program Preferences to be implemented.